Reconstitution of IκB Kinase in Yeast and Methods of Using Same

ABSTRACT

The invention provides a means for reconstituting IκB kinase in yeast in order to study the structure and regulation of IKK and to produce pharmacological therapies to block IKK. This invention can be used to express an IKK complex that is biochemically identical to IKK isolated from native cells and in coupled *in vitro* kinase assays to screen for its upstream regulators. The IKK expressed by reconstituting the yeast can be used to screen for unknown substrates and for pharmacological therapies that block its activity. The invention could also be used to screen for compounds that enhance its activity. The IKK may also be used as a source of material for crystallization and X-ray diffraction analysis.